

## Supplemental Material

### Environmental Science: Nano

**Title:** Inactivation of Pure Bacterial Biofilms by Impaction of Aerosolized Consumer Products Containing Nanoparticulate Metals

**Authors:** Jennifer Therkorn <sup>a</sup>, Leonardo Calderon <sup>a</sup>, Benton Cartledge <sup>b</sup>, Nirmala Thomas <sup>a</sup>, Brian Majestic <sup>b</sup>, Gediminas Mainelis <sup>a</sup>

**Affiliations:**

<sup>a</sup> Department of Environmental Sciences, Rutgers, The State University of New Jersey, New Brunswick, NJ

<sup>b</sup> Department of Chemistry and Biochemistry, University of Denver, Denver, CO

**Please address correspondence concerning this submitted manuscript to:**

Dr. Gediminas Mainelis

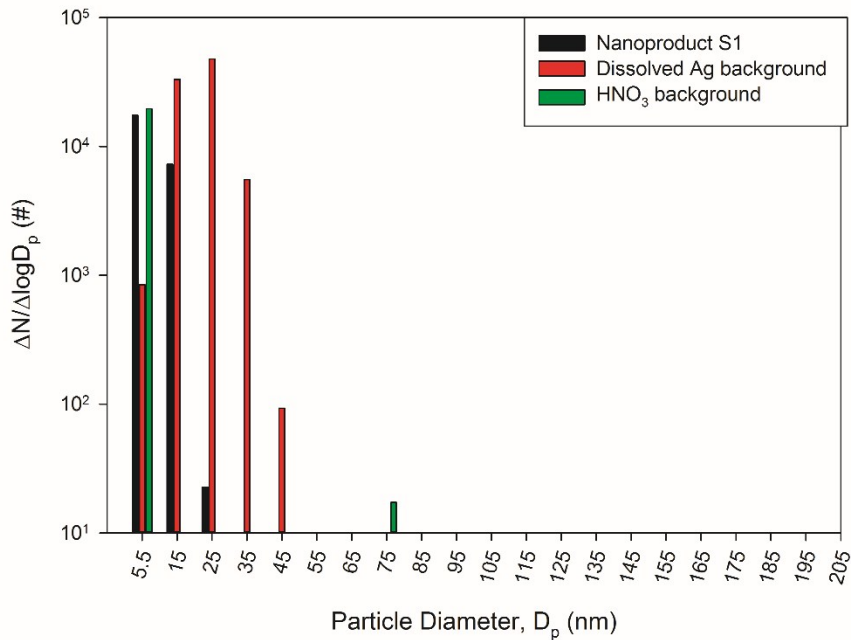
Department of Environmental Sciences

Rutgers, The State University of New Jersey

14 College Farm Rd.

New Brunswick, NJ 08901-8551

[mainelis@rutgers.edu](mailto:mainelis@rutgers.edu), (848) 932-5712 voice, (732) 932-8644 FAX



**Figure S1.** An example from one spICPMS analysis for nanoprodut S1 comparing its liquid suspension's nanoparticulate silver size distribution to that of the dissolved silver standard background and  $HNO_3$ . For accurate analysis of some high-concentration elements, samples were diluted 1:100 by using 100  $\mu L$  of digested sample and diluting to 10 mL using  $HNO_3$  (to maintain acid matrix) and 18.2  $M\Omega\text{-cm}$  water. As explained in the Materials and Methods section, silver nanoparticles were counted as present if their signal was greater than the background mean signal plus three times the standard deviation of the background. As illustrated by one example run shown here, nanoprodut S1 was found to contain only dissolved silver; i.e., no silver nanoparticles.